

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing: 31 August 2000 (31.08.00)	
International application No.: PCT/US00/04185	Applicant's or agent's file reference: 7442/JB
International filing date: 18 February 2000 (18.02.00)	Priority date: 22 February 1999 (22.02.99)
Applicant: SCHEPER, William, Michael et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International preliminary Examining Authority on:
17 July 2000 (17.07.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer: J. Zahra Telephone No.: (41-22) 338.83.38
---	---

PATENT COOPERATION TREATY

PCT

REC'D 09 JUL 2001

WIPO

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 7442/JB	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/04185	International filing date (day/month/year) 18/02/2000	Priority date (day/month/year) 22/02/1999
International Patent Classification (IPC) or national classification and IPC C11D1/72		
RECEIVED		
Applicant THE PROCTER & GAMBLE COMPANY et al.		
NOV 09 2001		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 6 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 17/07/2000	Date of completion of this report 05.07.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Drew, C Telephone No. +49 89 2399 8494



INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/0418

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-70 as originally filed

Claims, No.:

1-9 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/04185

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	
	No:	Claims	1 to 6 and 9
Inventive step (IS)	Yes:	Claims	
	No:	Claims	7 and 8
Industrial applicability (IA)	Yes:	Claims	1 to 9
	No:	Claims	

2. Citations and explanations **see separate sheet**

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

- 1 The following documents (D) from the international search report (ISR) will be referred to:

D1 WO 97 04058 A (HENKEL KGAA) 6 February 1997 (1997-02-06)

D2 WO 97 22651 A (PROCTER & GAMBLE) 26 June 1997 (1997-06-26)

D3 WO 98 10051 A (HENKEL KGAA) 12 March 1998 (1998-03-12)

D4 WO 92 15664 A (CIBA GEIGY AG) 17 September 1992 (1992-09-17)

D5 EP-A-0 661 043 (KAO CORP) 5 July 1995 (1995-07-05)

Section V

2 *Novelty (Article 33(2) PCT)*

- 2.1 The documents from the ISR disclose various detergent, shampoo and personal cleaning compositions comprising capped nonionic surfactants exhibiting X/Y values, determined according to the method set out on present page 6, in excess of one. To save unnecessary repetition only the documents set out on paragraph 1 above will be considered in detail in this written opinion. Thus:
- 2.2 D1 discloses compositions comprising nonionic surfactants of the fatty alcohol oligoethoxylate and/or oligopropoxylate type. Particular attention is drawn to the nonionic-surfactants employed in example 1.
- 2.3 D2 relates to nonionic surfactants prepared from glycidyl ethers for use in cleaning compositions and carriers for non- or low-aqueous cleaning compositions. The compositions of examples XI to XIII include capped ethoxylated alcohols, e.g. 2-butyl-C8E11.8OCH₃, as nonionic surfactants.
- 2.4 Claim 3 of D3 describes detergent compositions comprising capped ethoxylated and/or propoxylated alcohols as nonionic surfactants. The examples set out in table 1 on page 7 include cocofat alcohol10EObutyl ether.

- 2.5 The nonionic surfactants described in claim 1 of D4 are C2 to C4 alkoxyated alcohols which may be capped, see also examples 6 and 9 on pages 11 and 12.
- 2.6 The disclosure of claim 1 and example 15 of D5 is similar to that of D4.
- 2.7 Consequently claims 1 to 6 and 9 would appear to lack novelty. Claims 7 and 8, on the other hand, would seem to be novel.

3 *Inventive Step (Article 33(3) PCT)*

- 3.1 Claim 7 relates to two types of nonionic surfactants, i.e. (a) the alkyl capped ethoxylated and propoxylated alcohols of the final three formulae and (b) the butoxy capped alcohols of the remaining formulae. Claim 8 is also concerned with butoxy capped alcohols and can therefore be considered along with claim 7(b).
- 3.2 D1 would appear to be the closest state of the art for claim 7(a) as it employs alkyl capping to increase the solubility of nonionic surfactants. Since the final three formulae of this claim are included within the definition of capped nonionic surfactants appearing in D1, claim 7(a) cannot exhibit an inventive step.
- 3.3 The butoxy capped alcohols of claims 7(b) and 8 cannot be considered as capped in the same sense as those of claim 7(a) since there is no blocking of the terminal -OH group as with alkyl capping. These claims would not appear to be inventive in view of the fact that D4 and D5 already envisage the use of butoxy containing alcohols both with and without alkyl capping. Moreover, the application contains no comparative data at all. Inventive step would therefore need to be established, e.g. by comparative data against conventional uncapped nonionic surfactants.

Section VII

- 4 None of D1, D4 or D5 is acknowledged in the opening paragraphs of the description, see Rule 5.1(a)(ii) PCT.

S ction VIII

5 *Clarity (Article 6 PCT)*

- 5,1 The application is not consistent in the presentation of the invention. Thus, the claims specify that the nonionic surfactant is capped and exhibits an X/Y number greater than unity, while the summary of the invention on pages 2 and 3 requires butoxy capped alcohols. In this respect there may be some doubt about the exact meaning of the term "butoxy". Having regard to the formulae appearing in claims 7 and 8 and example 1 on pages 59 and 60 the examiner assumes that this expression refers to divalent C₄H₈O blocks.
- 5.2 The reference in claim 9 to the compositions further comprising deterative adjuncts renders the scope of claims 1 and 3 to 6 unclear as to whether the compositions of these claims should already include additives or adjuncts.



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C11D 1/72, 17/00, A61K 7/50	A3	(11) International Publication Number: WO 00/50549 (43) International Publication Date: 31 August 2000 (31.08.00)
(21) International Application Number: PCT/US00/04185 (22) International Filing Date: 18 February 2000 (18.02.00) (30) Priority Data: 60/121,171 22 February 1999 (22.02.99) US (71) Applicant (for all designated States except US): THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): SCHEPER, William, Michael [US/US]; 2393 Picnic Woods Drive, Lawrenceburg, IN 47025 (US). KLUESENER, Bernard, William [US/US]; 11619 New Biddinger Road, Harrison, OH 45030 (US). SIVIK, Mark, Robert [US/US]; 2434 Sheffield Court, Ft. Mitchell, KY 41017 (US). JORDAN, Glenn, Thomas, IV [US/US]; 5750 Ridgeview Drive, Indian Springs, OH 45011 (US). VINSON, Philip, Kyle [US/US]; 5803 Windermere Lane, Fairfield, OH 45014 (US). (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).		(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 2 November 2000 (02.11.00)
(54) Title: CLEANING COMPOSITIONS CONTAINING SELECTED NONIONIC SURFACTANTS		
(57) Abstract <p>A cleaning composition, e.g. granular or liquid laundry detergent, dishwashing liquid shampoo, personal cleansing commposition or hard surface cleaning composition, contains a capped nonionic surfactant with an X/y number greates than 1.</p>		

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece			TR	Turkey
BG	Bulgaria	HU	Hungary	ML	Mali	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MN	Mongolia	UA	Ukraine
BR	Brazil	IL	Israel	MR	Mauritania	UG	Uganda
BY	Belarus	IS	Iceland	MW	Malawi	US	United States of America
CA	Canada	IT	Italy	MX	Mexico	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NE	Niger	VN	Viet Nam
CG	Congo	KE	Kenya	NL	Netherlands	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NO	Norway	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	NZ	New Zealand		
CM	Cameroon			PL	Poland		
CN	China	KR	Republic of Korea	PT	Portugal		
CU	Cuba	KZ	Kazakstan	RO	Romania		
CZ	Czech Republic	LC	Saint Lucia	RU	Russian Federation		
DE	Germany	LI	Liechtenstein	SD	Sudan		
DK	Denmark	LK	Sri Lanka	SE	Sweden		
EE	Estonia	LR	Liberia	SG	Singapore		

INTERNATIONAL SEARCH REPORT

Int. Jonal Application No

PCT/US 00/04185

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C11D1/72 C11D17/00 A61K7/50

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C11D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 22651 A (PROCTER & GAMBLE) 26 June 1997 (1997-06-26)	1-3,6,9
A	abstract page 54, paragraph 3; claim 1; examples XI-XIII	7,8
X	WO 98 10051 A (HENKEL KGAA) 12 March 1998 (1998-03-12)	6,8,9
A	page 4, paragraph 2; table 1	7
X	US 4 443 363 A (KLINGER WOLFGANG ET AL) 17 April 1984 (1984-04-17)	6,8,9
A	claim 1; examples 5-7	7
X	US 4 548 729 A (SCHMID KARL ET AL) 22 October 1985 (1985-10-22)	6,8,9
A	abstract; examples 5,6,8,9	7
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

28 June 2000

Date of mailing of the international search report

23/08/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Saunders, T

INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 00/04185

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 05441 A (HENKEL KGAA) 23 February 1995 (1995-02-23)	6,9
A	abstract; examples 4.1,4.5 ---	7,8
X	WO 97 04058 A (HENKEL KGAA) 6 February 1997 (1997-02-06) claims 1,6,20; example 1 ---	1,9
X	EP 0 054 366 A (ICI PLC) 23 June 1982 (1982-06-23) examples ---	1,9
X	WO 92 15664 A (CIBA GEIGY AG) 17 September 1992 (1992-09-17) page 7, paragraph 10 -page 8, paragraph 2; examples 6,9 ---	3,9
X	EP 0 661 043 A (KAO CORP) 5 July 1995 (1995-07-05) example 15 ---	5,9
X	EP 0 224 167 A (HENKEL KGAA) 3 June 1987 (1987-06-03) page 2, line 1 - line 9; examples 1B-1I ---	5,9
X	GB 2 158 080 A (ABM CHEMICALS LTD) 6 November 1985 (1985-11-06) example 5 ---	6,9
A	EP 0 859 044 A (PROCTER & GAMBLE) 19 August 1998 (1998-08-19) examples C-F ---	6-9
A	US 4 780 237 A (SCHMID KARL-HEINZ ET AL) 25 October 1988 (1988-10-25) abstract; examples 8,9 ---	6-9
A	EP 0 709 450 A (PROCTER & GAMBLE) 1 May 1996 (1996-05-01) page 11, line 40 - line 45; claim 1; example 2 ---	2,3,5,6, 9
A	WO 99 06466 A (PROCTER & GAMBLE) 11 February 1999 (1999-02-11) examples 13,15,16 -----	4,6-9

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int. .dional Application No

PCT/US 00/04185

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9722651 A	26-06-1997	NONE	
WO 9810051 A	12-03-1998	DE 19635554 A	05-03-1998
US 4443363 A	17-04-1984	DE 3048642 A AT 8659 T CA 1160534 A DE 3165129 D EP 0054895 A JP 1681706 C JP 3045120 B JP 58109598 A	15-07-1982 15-08-1984 17-01-1984 30-08-1984 30-06-1982 31-07-1992 10-07-1991 29-06-1983
US 4548729 A	22-10-1985	DE 3315951 A AT 40716 T BR 8402023 A CA 1225409 A DE 3476680 D DK 94584 A, B, EP 0124815 A ES 532061 D ES 8504917 A JP 1863771 C JP 5076519 B JP 59207997 A ZA 8403244 A	08-11-1984 15-02-1989 11-12-1984 11-08-1987 16-03-1989 03-11-1984 14-11-1984 01-05-1985 16-07-1985 08-08-1994 22-10-1993 26-11-1984 24-12-1984
WO 9505441 A	23-02-1995	DE 4327327 A EP 0724621 A	16-02-1995 07-08-1996
WO 9704058 A	06-02-1997	DE 19526483 A	23-01-1997
EP 0054366 A	23-06-1982	AU 7822981 A	24-06-1982
WO 9215664 A	17-09-1992	AT 138972 T AU 1228192 A BR 9205707 A DE 69211334 D EP 0574413 A ES 2088576 T JP 6505059 T KR 195844 B MX 9200907 A US 5559273 A	15-06-1996 06-10-1992 02-08-1994 11-07-1996 22-12-1993 16-08-1996 09-06-1994 15-06-1999 01-09-1992 24-09-1996
EP 0661043 A	05-07-1995	JP 7197083 A US 5554315 A	01-08-1995 10-09-1996
EP 0224167 A	03-06-1987	DE 3541535 A JP 62136235 A	27-05-1987 19-06-1987
GB 2158080 A	06-11-1985	NONE	
EP 0859044 A	19-08-1998	WO 9836042 A	20-08-1998
US 4780237 A	25-10-1988	AT 68519 T DE 3773781 A EP 0254208 A	15-11-1991 21-11-1991 27-01-1988

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/04185

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4780237 A		JP 2533555 B JP 63035697 A	11-09-1996 16-02-1988
EP 0709450 A	01-05-1996	CA 2203268 A CN 1170426 A JP 10507788 T WO 9612782 A	02-05-1996 14-01-1998 28-07-1998 02-05-1996
WO 9906466 A	11-02-1999	EP 0998514 A	10-05-2000